



PIMS



2015 PIMS Publications

PIMS 2015 Publications

Below we list publications for PIMS CRG activities, PDFs and CNRS Researchers. Only publications dated 2015 are listed.

1. S. Abshoff, P. Kling, C. Markarian, F. Meyer auf der Heide and P. Pietrzyk, Towards the price of leasing online, *Journal of Combinatorial Optimization*, pp. 1–20 (2015)
2. J. Achter, S. Casalaina-Martin and C. Vial, On descending cohomology geometrically, submitted (2015)
3. J. Achter, J. Gordon and S. A. Altug, Elliptic curves, random matrices and orbital integrals, submitted (2015)
4. J. Achter and E. W. Howe, Split abelian surfaces over finite fields and reductions of genus-2 curves, submitted (2015)
5. J. Achter and R. Pries, Superspecial rank of supersingular abelian varieties and jacobians, *J. Theor. Nombres Bordeaux*, Vol. 27, pp. 605–624 (2015)
6. A. Adem and M.C. Cheng, Representation spaces for central extensions and almost commuting unitary matrices, submitted (2015)
7. A. Adem and J. Gomez, A classifying space for commutativity in Lie groups, *Algebraic & Geometric Topology*, Vol. 15, pp. 493–535 (2015)
8. A. Adem, J. Gomez, J. Lind and U. Tillman, Infinite loop spaces and nilpotent Ktheory, submitted (2015)
9. A. Adem, D. Sheinbaum and G. Semenoff, Topology of Fermi surfaces and anomalies, submitted (2015)
10. M. Agueh and M. Bowles, Weak solutions to a fractional Fokker-Planck equation via splitting and Wasserstein gradient flow, *Applied Mathematics Letters* 42, pp. 30–35 (2015)
11. M. Agueh, G. Carlier and R. Illner, Remarks on a class of kinetic models of granular media: asymptotics and entropy bounds, *Kinetic and Related Models*, accepted (2015)
12. M. Agueh, B. Khouider and L.P. Saumier, Optimal transport for particle image velocimetry, *Communications in Mathematical Sciences*, accepted (2015)
13. A. Akbary and A. T. Felix, On invariants of elliptic curves on average, *Acta Arith.*, Vol. 168, pp. 31–70 (2015)
14. M.A. Alfonseca and J. Kim, On the local convexity of intersection bodies of revolution, *Canad. J. Math.*, Vol. 67, pp. 3–27 (2015)
15. J. Anderson, H. Parlier and A. Pettet, Relative shapes of thick subsets of moduli space, submitted (2015)
16. B. Antieau and B. Williams, On the classification of oriented 3-plane bundles over a 6-complex, *Topology and its Applications*, accepted (2015)
17. B. Antieau and B. Williams, The prime divisors of the period and index of a Brauer class, *Journal of Pure and Applied Algebra*, accepted (2015)
18. B. Antieau and B. Williams, The topological period-index problem over 6-complexes, *Journal of Topology*, accepted (2015)
19. V. Asimit and Y. Zinchenko, CVaR bounds with partial dependence information, *Operations Research*, submitted (2015)
20. S. Assaf and K. Pal, Partial metric spaces with negative distances and fixed point theorems, *Topology Proceedings*, accepted (2015)
21. S. Assaf and K. Pal, Partial n-metric spaces and fixed point theorems, submitted (2015)

22. M. Atapour, C. Soteros, D.W. Sumners and S.G. Whittington, Counting closed 2-manifolds in tubes in hypercubic lattices, *Journal of Physics A: Mathematical and Theoretical*, Vol. 48 (2015)
23. E. Bahuaud and E. Woolgar, Asymptotically hyperbolic normalized Ricci flow and rotational symmetry, preprint (2015)
24. J. Balakrishnan, A. Besser and J. S. Müller, Computing integral points on hyperelliptic curves using quadratic Chabauty, *Mathematics of Computation*, accepted (2015)
25. N. Barcelo, P. Kling, M. Nugent, K. Pruhs and M. Scquizzato, On the complexity of speed scaling, *Proceedings of the 40th International Symposium on Mathematical Foundations of Computer Science (MFCS)*, pp. 75–89 (2015)
26. S. Bartz, H.H. Bauschke, S.M. Moffat and X. Wang, The resolvent average of monotone operators: dominant and recessive properties, *SIAM Journal on Optimization*, (2015)
27. B. Basak and S. Sarkar, Equilibrium and equivariant triangulations of some small covers with minimum number of vertices, *J. Ramanujan Math. Soc.*, Vol. 30, pp. 29–50 (2015)
28. K. Bauer, M. Basterra, A. Beaudry, R. Eldred, B. Johnson, M. Merling and S. Yeakel, Unbased calculus for functors to chain complexes, *Contemp. Math.*, Vol. 641, pp. 29–48 (2015)
29. K. Bauer, D. Sen and P. Zvengrowski, A generalized Goursat Lemma, *Tatra Mountain Mathematics Journal*, accepted (2015)
30. H.H. Bauschke, J. Bolte and M. Teboulle, A descent lemma beyond Lipschitz continuity: first order methods revisited and applications, *Mathematics of Operations Research*, submitted (2015)
31. H.H. Bauschke, M.N. Dao and W.M. Moursi, The Douglas-Rachford algorithm in the affine-convex case, *Operations Research Letters*, submitted (2015)
32. H.H. Bauschke and W.M. Moursi, The Douglas-Rachford algorithm for two (not necessarily intersecting) affine subspaces, *SIAM Journal on Optimization*, submitted (2015)
33. H.H. Bauschke, J.Y. Bello Cruz, T.T.A. Nghia, H.M. Phan and X. Wang, Optimal rates of convergence of matrices with applications, *Linear Algebra and its Applications*, accepted (2015)
34. H.H. Bauschke, J. Chen and X. Wang, A Bregman projection method for approximating fixed points of quasi-Bregman nonexpansive mappings, *Applicable Analysis* 94, pp. 75–84 (2015)
35. H.H. Bauschke, M.N. Dao and W.M. Moursi, On Fejer monotone sequences and nonexpansive mappings, *Linear and Nonlinear Analysis*, accepted (2015)
36. H.H. Bauschke, M.N. Dao and W.M. Moursi, Douglas-Rachford algorithm for solving convex feasibility problems in Euclidean spaces, *Journal of Global Optimization*, accepted (2015)
37. H.H. Bauschke, M.N. Dao, D. Noll and H.M. Phan, On Slater's condition and finite convergence of the Douglas-Rachford algorithm for solving convex feasibility problems in Euclidean spaces, *Journal of Global Optimization*, accepted (2015)
38. H.H. Bauschke, M.N. Dao, D. Noll and H.M. Phan, Proximal point algorithm, Douglas-Rachford algorithm and alternating projections: a case study, *Journal of Convex Analysis*, accepted (2015)
39. H.H. Bauschke, G.R. Douglas and W.M. Moursi, On a result of Pazy concerning the asymptotic behaviour of nonexpansive mappings, *Journal of Fixed Point Theory and Applications*, accepted (2015)
40. H.H. Bauschke, W. Hare and W.M. Moursi, A derivative-free comirror algorithm, *Optim. Method. Softw.*, Vol. 30, pp. 706–726 (2015)
41. H.H. Bauschke, W. Hare and W.M. Moursi, On the range of the Douglas-Rachford operator, *Mathematics of Operations Research*, accepted (2015)

42. H.H. Bauschke, V.R. Koch and H.M. Phan, Stadium norm and Douglas-Rachford splitting: a new approach to road design optimization, *Operations Research*, accepted (2015)
43. H.H. Bauschke, Y. Lucet and H.M. Phan, On the convexity of piecewise-defined functions, *ESAIM COCV*, accepted (2015)
44. H.H. Bauschke and W.M. Moursi, On the order of the operators in the Douglas-Rachford algorithm, *Optimization Letters*, accepted (2015)
45. H.H. Bauschke, C. Wang, X. Wang and J. Xu, On subgradient projectors, *SIAM Journal on Optimization*, Vol. 25, 1064–1082 (2015)
46. H.H. Bauschke, C.Wang, X. Wang and J. Xu, On the finite convergence of a projected cutter method, *Journal of Optimization Theory and Applications*, Vol. 165, pp. 901–916 (2015)
47. H.H. Bauschke, D. Noll and H.M. Phan, Linear and strong convergence of algorithms involving averaged nonexpansive operators, *Journal of Mathematical Analysis and Applications*, Vol. 421, pp. 1–20 (2015)
48. M. Bayeh, K. Hess, V. Karpova, M. Kedziorek, E. Riehl and B. Shipley, Left-induced model structures and diagram categories, *Contemporary Mathematics*, Vol. 641, pp. 49–81 (2015)
49. M. Bayeh and S. Sarkar, Some aspects of equivariant LS-category, *Topology and its Applications*, Vol. 196, pp. 133–154 (2015)
50. M. Bayeh and S. Sarkar, Orbit class and remarks on invariant topological complexity, submitted (2015)
51. M. Bayeh and S. Sarkar, Equivariant LS-category of torus manifolds, submitted (2015)
52. N. R. Beaton, The critical pulling force for self-avoiding walks, *Journal of Physics A: Mathematical and Theoretical*, Vol. 48 (2015)
53. N. R. Beaton, A. J. Guttmann, I. Jensen and G. F. Lawler, Compressed self-avoiding walks, bridges and polygons, *Journal of Physics A Mathematical and Theoretical* Vol. 48 (2015)
54. N. R. Beaton and G. K. Iliev, Two-sided prudent walks: A solvable non-directed model of polymer adsorption, *Journal of Statistical Mechanics: Theory and Experiment* (2015)
55. K. Behrend and E. Getzler, Geometric higher groupoids and categories, preprint (2015)
56. K. Behrend and B. Noohi, Moduli of non-commutative polarized schemes, preprint (2015)
57. V. Beiranvand, W. Hare, Y. Lucet and S. Hossain, Multi-haul quasi network flow model for vertical alignment optimization, *Operations Research*, submitted (2015)
58. M.A. Bennett and A. Rechnitzer, Computing elliptic curves over \mathbb{Q} : bad reduction at one prime, *Proceedings of 2015 AMMCS-CAIMS Congress*, submitted (2015)
59. P. Berenbrink, C. Cooper, T. Friedetzky, T. Friedrich and T. Sauerwald, Randomized diffusion for indivisible loads, *J. Comput. Syst. Sci.*, Vol. 81, pp. 159–185 (2015)
60. M. Bergeron, The topology of nilpotent representations in reductive groups and their maximal compact subgroups, *Geometry and Topology*, accepted (2015)
61. K. Bigdeli, W. Hare, J. Nutini and S. Tesfamariam, Optimal design of damper connectors for adjacent buildings, *Optim. Eng.*, accepted (2015)
62. S. Black, I. Crump, M. DeVos and K. Yeats, Forbidden minors for graphs with no first obstruction to parametric Feynman integration, *Discrete Mathematics*, Vol. 338, pp. 9–35 (2015)
63. R. Blair, J. Burke and R. Koytcheff, A prime decomposition theorem for the 2-string link monoid, *J. Knot Theory Ramif.*, Vol. 24 (2015)
64. J. Bryan, The Donaldson-Thomas theory of $K3 \times E$ via the topological vertex, preprint (2015)

65. J. Bryan, G. Oberdieck, R. Pandharipande and Q. Yin, Curve counting on abelian surfaces and threefolds, preprint (2015)
66. C. J. Budd, A. N. Chakhchoukh, T. J. Dodwell and R. Kuske, Chevron folding patterns and heteroclinic orbits, *Physica D*, submitted (2015)
67. C. J. Budd and J. M. Stockie, Multi-layer asymptotic solution for wetting fronts in porous media with exponential moisture diffusivity, *Studies in Applied Mathematics*, accepted (2015)
68. R. Budney, Combinatorial spin structures on triangulated manifolds, submitted (2015)
69. R. Budney and B. Burton, Embeddings of 3-manifolds in S^4 from the point of view of the 11-tetrahedron census, preprint (2015)
70. R. Budney and J. Hillman, A small, infinitely-ended 2-knot group, submitted (2015)
71. R. Budney, D. Sinha, R. Koytcheff and J. Conant, Embedding calculus knot invariants are of finite type, submitted (2015)
72. H. Bulens, P. Lambrechts, D. Stanley, Pretty rational models for Poincare duality pairs, submitted (2015)
73. H. Bulens, P. Lambrechts and D. Stanley, Rational models of the complement of a subpolyhedron in a manifold with boundary, submitted (2015)
74. J. Burke and R. Koytcheff, A colored operad for string link infection, *Algebr. Geom. Topol.*, accepted (2015)
75. S. Burrill, J. Courtiel, E. Fusy, S. Melzer and M. Mishna, Tableau sequences, open diagrams, and Baxter families, submitted (2015)
76. S. Burrill, S. Elizalde, M. Mishna and L. Yen, A generating tree approach to k -nonnesting set partitions and permutations, *Annals of Combinatorics*, accepted (2015)
77. S. Burrill, S. Melzer and M. Mishna, A Baxter class of a different kind, and other bijective results using tableau sequences ending with a row shape, *Proceedings of Formal Power Series and Algebraic Combinatorics* (2015)
78. D. Calegari and D. Rolfsen, Groups of PL homeomorphisms of cubes, *Annales de la Faculte des Sciences de Toulouse*, special issue dedicated to Michel Boileau, accepted (2015)
79. Y-B. Chan and A. Rechnitzer, Upper bounds on the growth rates of hard squares and related models via corner transfer matrices, submitted (2015)
80. X. Chen, L. Guo, Z. Lu and J.J. Ye, A feasible augmented Lagrangian method for non-Lipschitz nonconvex programming, *SIAM Journal on Numerical Analysis*, submitted (2015)
81. W. Chuang, D.E. Diaconescu, R. Donagi and T. Pantev, Parabolic Refined Invariants and Macdonald Polynomials, *Communications in Mathematical Physics*, Vol. 335, pp. 1323–1379 (2015)
82. P. N. Chung, C. Costello and B. Smith, Fast, uniform, and compact scalar multiplication for elliptic curves and genus 2 jacobians with applications to signature schemes, *CoRR* (2015)
83. M. Clay, J. Mangahas and A. Pettet, An algorithm to detect full irreducibility by bounding the volume of periodic free factors, *Michigan Math. J.*, accepted (2015)
84. A. Clingher, C.F. Doran and A. Malmendier, Special function identities from superelliptic Kummer varieties, preprint (2015)
85. F. Cohen, R. Komendarczyk, R. Koytcheff and C. Shonkwiler, Homotopy string links and the χ -invariant, submitted (2015)
86. C. Costello and P. Longa, Fourq: Four-dimensional decompositions on a q -curve over the mersenne prime, *Lecture Notes in Computer Science*, Vol. 9452, pp. 214–235, (2015)
87. J. Courtiel, A general notion of activity for the Tutte polynomial, submitted (2015)

88. J. Courtiel, C. Chauve and Y. Ponty, Counting, generating and sampling tree alignments, Refereed proceedings of the SeqBio 2015 workshop (2015)
89. T. Creutzig and A. Babichenko, Harmonic analysis and free field realization of the takiff supergroup of $GL(1|1)$, submitted (2015)
90. T. Creutzig and Y. Hikida, Higgs phenomenon for higher spin fields on AdS_3 , submitted (2015)
91. T. Creutzig and A.R. Linshaw, Orbifolds of symplectic fermion algebras, Transactions of the American Mathematical Society, accepted (2015)
92. T. Creutzig and A.R. Linshaw, Cosets of affine vertex algebras inside larger structures, submitted (2015)
93. T. Creutzig, A. Milas and S. Wood, On Regularised Quantum Dimensions of the Singlet Vertex Operator Algebra and False Theta Functions, submitted (2015)
94. I. Crump, M. DeVos and K. Yeats, Period Preserving Properties of an Invariant from the Permanent of Signed Incidence Matrices, submitted (2015)
95. B. Datta and S. Sarkar, Equilibrium triangulations of some quasitoric 4-manifolds, submitted (2015)
96. C. David, D.K. Huynh and J. Parks, One-level density of families of elliptic curves and the Ratios Conjectures, Research in Number Theory, accepted (2015)
97. B. Degener, B. Kempkes, P. Kling and F. Meyer auf der Heide, Linear and competitive strategies for continuous robot formation problems, Transactions on Parallel Computing (TOPC), Vol. 2.1, p. 2 (2015)
98. I. Dell'Ambrogio and D. Stanley, Affinely weakly regular tensor triangulated categories, submitted (2015)
99. C.F. Doran, D. Favero, T.L. Kelly, Equivalences of families of stacky toric Calabi-Yau hypersurfaces, preprint (2015)
100. C.F. Doran, A. Harder, A.Y. Novoseltsev and A. Thompson, Families of lattice polarized K3 surfaces with monodromy, International Mathematics Research Notices, Vol. 2015, pp. 12265–12318 (2015)
101. C.F. Doran, A. Harder, A.Y. Novoseltsev and A. Thompson, Calabi-Yau Threefolds Fibred by Mirror Quartic K3 Surfaces, preprint (2015)
102. C.F. Doran and A. Malmendier, Calabi-Yau manifolds realizing symplectically rigid monodromy tuples, preprint (2015)
103. C.F. Doran, S. Mendez-Diez and J. Rosenberg, String theory on elliptic curve orientifolds and KR-theory, Comm. Math. Phys., Vol. 335, pp. 955–1001 (2015)
104. M. Elder, G. Lee and A. Rechnitzer, Permutations generated by a depth 2 stack and an infinite stack in series are algebraic, Electronic Journal of Combinatorics, Vol. 22 (2015)
105. M. Elder, A. Rechnitzer and E.J. Janse van Rensburg, Random sampling of trivial words in finitely presented groups, Experimental Mathematics 24, pp. 391–409 (2015)
106. D. Favero, M. Ballard, D. Deliu, U. Isik and L. Katzarkov, Resolutions in Factorization Categories, Advances in Mathematics, submitted (2015)
107. D. Favero, M. Ballard, C. Diemer, L. Katzarkov and G. Kerr, The Mori Program and Non-Fano Toric Homological Mirror Symmetry, Trans. Amer. Math. Soc., Vol. 36, pp. 8933–8974 (2015)
108. D. Favero, C. Doran and T. Kelly, Equivalences of Families of Stacky Toric Calabi-Yau Hypersurfaces, preprint (2015)
109. A. T. Felix, The index of a modulo p , Contemporary Mathematics, Vol. 655, pp. 83–96 (2015)
110. A. T. Felix, On the common divisors of $p-1$ and the order of a modulo p , submitted (2015)

111. J. Fiala, J. Hubicka and J. Long, An universality argument for graph homomorphisms (extended abstract), *Electronic Notes in Discrete Mathematics*, Vol. 49, pp. 643–649 (2015)
112. A. Fiori, On the j -invariants of CM-elliptic curves defined over \mathbb{Z}_p , submitted (2015)
113. D. Fiorilli, J. Parks and Södergren, Low-lying zeros of elliptic curve L-functions: Beyond the ratios conjecture, submitted (2015)
114. G.J. Galloway and E. Woolgar, On static Poincaré-Einstein metrics, *JHEP*, Vol. 6 (2015)
115. G. Gandini, S. Meinert and H. Rüping, The Farrell-Jones conjecture for fundamental groups of graphs of abelian groups, *Groups, Geometry and Dynamics*, accepted (2015)
116. P. Ghomi, P. McGeachy, C. Bullock, R. Khan and Y. Zinchenko, Modeling and comparison of four different dose-volume-based approaches for radiotherapy treatment plan optimization, *Physics in Medicine and Biology*, submitted (2015)
117. J. Gou and M. J. Ward, An asymptotic analysis of a 2-D model of dynamically active compartments coupled by bulk diffusion, *J. Nonlinear Science*, submitted (2015)
118. E. Guerrini, L. Imbert and T. Winterhalter, Randomizing scalar multiplication using exact covering systems of congruences, *Cryptology ePrint Archive*, Report 2015/475, (2015)
119. L. Guo and J.J. Ye, Necessary optimality conditions for optimal control problems with equilibrium constraints, *SIAM Journal on Control and Optimization*, submitted (2015)
120. A. Harder and C.F. Doran, Toric degenerations and the Laurent polynomials related to Givental's Landau-Ginzburg models, preprint (2015)
121. W. Hare and M. Jaberipour, Adaptive interpolation strategies in derivative-free optimization: a case study, *Pac. J. Optim.*, accepted (2015)
122. W. Hare, J. Loepky and B. Williams, Discussion: The nomax strategy and correlated outputs, *Technometrics*, accepted (2015)
123. W. Hare, Y. Lucet and F. Rahman, A mixed-integer linear programming model to optimize the vertical alignment considering blocks and side-slopes in road construction, *European Journal of Operational Research*, Vol. 241, p. 631–641 (2015)
124. W. Hare and C. Planiden, Using inexact subgradients to compute proximal points of convex functions, *Set-Valued and Variational Analysis*, submitted (2015)
125. W. Hare, M. Solodov and C. Sagastizabal, A proximal bundle method for nonsmooth nonconvex functions with inexact information, *Comput. Optim. Appl.*, accepted (2015)
126. W. Hare and H. Song, On the cardinality of positively linearly independent sets, *Optimization Letters*, accepted (2015)
127. D. Hartman, J. Hubicka and J. Nešetřil, Complexities of relational structures, *Mathematica Slovaca*, Vol. 65, pp. 229–246 (2015)
128. D. Hirpa, W. Hare, Y. Lucet, Y. Pushak and S. Tesfamariam, A multiobjective optimization framework for three-dimensional road alignment design, *Transport Res. C-Emer.*, submitted (2015)
129. J. Hubicka and J. Nešetřil, Universal structures with forbidden homomorphisms, *Logic Without Borders: Essays on Set Theory, Model Theory, Philosophical Logic and Philosophy of Mathematics*, De Gruyter, pp. 241–264 (2015)
130. J. Hubicka and J. Nešetřil, Ramsey classes with forbidden homomorphisms and a closure (extended abstract), *Electronic Notes in Discrete Mathematics*, Vol. 49, pp. 737–745 (2015)
131. J. Hubicka and J. Nešetřil, Homomorphism and embedding universal structures for restricted classes, *Journal of Multiple-Valued Logic and Soft Computing*, accepted (2015)

132. J. Hubicka and J. Nešetřil, Bowtie-free graphs have a Ramsey lift, *Advances in Applied Mathematics*, submitted (2015)
133. L. Hui, M. Olbermann and D. Stanley, One-connectivity and finiteness of Hamiltonian S^1 -manifolds with minimal fixed sets, *J.Lond. Math. Soc.*, Vol. 2 (2015)
134. T. Hulshof, The one-arm exponent for mean-field long-range percolation, submitted (2015)
135. M. J. Jacobson, Jr., Y. Lee, R. Scheidler and H. C. Williams, Construction of all cubic function fields of a given square-free discriminant, *International Journal of Number Theory*, Vol. 11, pp. 1839–1885 (2015)
136. J. Janssen and A. Mehrabian, Rumours spread slowly in a small world spatial network, *Proceedings of the 12th Workshop on Algorithms and Models for the Web Graph* (2015)
137. B.R. Jones and K. Yeats, Tree hook length formulae, Feynman rules and B-series, *Ann. Inst. Henri Poincaré Comb. Phys. Interact.* Vol. 2, pp. 413–430 (2015)
138. J. Kim and A. Zvavitch, Stability of the reverse Blaschke-Santaló inequality for unconditional convex bodies, *Proc. Amer. Math. Soc.*, Vol. 143, pp. 1705–1717 (2015)
139. R. Koytcheff, Homotopy Bott–Taubes integrals and the Taylor tower for spaces of knots and links, *J. Homotopy and Related Structures*, accepted (2015)
140. F.-V. Kuhlmann and K. Pal, The model theory of separably tame valued fields, *Journal of Algebra*, accepted (2015)
141. U. Kühn and J. S. Müller, A geometric approach to constructing elements of k_2 of curves, submitted (2015)
142. M. Lei, J. Zhang, X. Dong and J.J. Ye, Modeling the bids of wind power producers in the day-ahead market with stochastic security-constrained market clearing, submitted (2015)
143. A. Li and J.J. Ye, Necessary optimality conditions for optimal control problems with nonsmooth mixed state and control constraints, *Set-Valued and Variational Analysis* accepted (2015)
144. G.H. Lin, L. Guo and J.J. Ye, Solving mathematical programs with equilibrium constraints, *Journal of Optimization Theory and Applications*, Vol. 166, pp. 234–256 (2015)
145. M. Lin, Some applications of a majorization inequality due to Bapat and Sunder, *Linear Algebra and its Application*, Vol. 469, pp. 510–517 (2015)
146. M. Lin, Extension of a result of Haynsworth and Hartfiel, *Archiv der Mathematik*, Vol. 104, pp. 93–100 (2015)
147. X. Long, Z. Peng and X. Wang, Characterizations of the solution set for nonconvex semi-infinite programming problems, *Journal of Nonlinear and Convex Analysis*, accepted (2015)
148. W. Lück, H. Kammeyer and H. Rüpning, The Farrell-Jones conjecture for arbitrary lattices in virtually connected Lie Groups, submitted (2015)
149. P. McGeachy, J.E. Villarreal-Barajas, Y. Zinchenko and R. Khan, Modulated photon radiotherapy (XMRT): an algorithm for the simultaneous optimization of photon beamlet energy and intensity in external beam radiotherapy (EBRT) planning, *Physics in Medicine and Biology*, accepted (2015)
150. S. Melczer and M. Mishna, Enumerating lattice paths with symmetries through multivariate diagonals, *Algorithmica*, accepted (2015)
151. M. Mishna, Regularity in Weighted Graphs: A Symmetric Function Approach, submitted (2015)
152. S. Mondal, Y. Lucet and W. Hare, Optimizing horizontal alignment of roads in a specified corridor, *Computers & Operations Research*, Vol. 64, pp. 130–138 (2015)
153. J. S. Müller and M. Stoll, Computing canonical heights on elliptic curves in quasi-linear time, submitted (2015)

154. H. Namazi, A. Pettet and P.Reynolds, Ergodic decompositions for folding and unfolding paths in outer space, submitted (2015)
155. G. Naylor and D. Rolfsen, Generalized torsion in knot groups, submitted (2015)
156. J. Nie, L. Wang and J.J. Ye, Bilevel polynomial programs and semidefinite relaxation methods, SIAM Journal on Optimization, submitted (2015)
157. J. Parks, Amicable pairs and aliquot cycles on average, Int. J. Number Theory, accepted (2015)
158. J. Parks, A remark on elliptic curves with a given number of points over finite fields, Contemporary Mathematics, accepted (2015)
159. J. Parks, An asymptotic for the average number of amicable pairs, submitted (2015)
160. C. Planiden and X. Wang, Most convex functions have a unique minimizer, Journal of Convex Analysis, accepted (2015)
161. C. Planiden and X. Wang, Strongly convex functions, Moreau envelopes and the generic nature of convex functions with strong minimizers, SIAM Journal on Optimization, submitted (2015)
162. Y. Pushak, W. Hare and Y. Lucet, Multiple-Path Selection for new Highway Alignments using Discrete Algorithms, European J. Oper. Res., accepted (2015)
163. C. Quigley, Physics of mirror symmetry: The basics, Calabi-Yau Varieties: Arithmetic, Geometry and Physics, accepted (2015)
164. C. Quigley, Gaugino condensation and the cosmological constant, JHEP Vol. 1506, p. 104 (2015)
165. J. Renes, C. Costello and L. Batina, Complete addition formulas for prime order elliptic curves, IACR Cryptology ePrint Archive, p. 1060 (2015)
166. D. Rolfsen, A topological view of ordered groups, Knots in Poland III Proceedings, accepted (2015)
167. D. Rolfsen, Low dimensional topology and ordering groups, Math Slovaca, Festschrift J. Jakubik, accepted (2015)
168. D. Rolfsen, Ordering knot groups, Oberwolfach Conference on Knot Theory Proceedings, accepted (2015)
169. H. R eping, The Farrell-Jones conjecture for S-arithmetic groups, Journal of Topology, accepted (2015)
170. S. Sarafrazi, J. Loepky and Y. Lucet, A Survey on the Sensitivity Analysis Methods for Understanding Complex Models, submitted (2015)
171. S. Sarkar, On triangulations of RP^n , submitted (2015)
172. S. Sarkar, On Z_n -equivariant triangulations of RP^n with few vertices, pages 15, submitted (2015)
173. S. Sarkar, Some Z_n -equivariant triangulations of CP^n , pages 14, submitted (2015)
174. S. Sarkar, Complex cobordism of quasitoric orbifolds, Topology and its Applications, accepted (2015)
175. S. Simons and X. Wang, Weak subdifferentials, rL -density and maximal monotonicity, Set-Valued and Variational Analysis, Vol. 23, pp. 631–642 (2015)
176. D. Stanley, Derived equivalences for hereditary Artin algebras, submitted (2015)
177. R. Tabbara, A.L. Owczarek and A. Rechnitzer, An exact solution of three interacting friendly walks in the bulk, submitted (2015)
178. A. Thompson, C. Doran, A. Harder, A. Novoseltsev, Calabi-Yau Threefolds fibred by M_2 -polarized K_3 surfaces, submitted (2015)

179. A. Thompson, C. Doran, A. Harder, A. Novoseltsev, Calabi-Yau Threefolds fibred by Kummer surfaces associated to products of elliptic curves, submitted (2015)
180. J.C. Tzou, P.G. Kevrekidis, T. Kolokolnikov and R. Carretero-Gonzalez, Weakly nonlinear analysis of vortex formation in a dissipative variant of the Gross-Pitaevskii equation, SIADS, submitted (2015)
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